AMENDMENT TO THE CLAIMS

1.   (Currently Amended)   A method for real time alert, ~~said method~~ comprising the steps of:

receiving an information packet~~;~~, said information packets either provided by an information source or representative of a portion of a received signal provided by an information source;

extracting at least one extracted term out of the information packet;

determining whether an extracted term out of said at least one extracted term matches an alert term <u>within an alert criteria</u>, and accordingly updating a matching term information representative of a reception of matching extracted terms, ~~an alert criteria comprising of at least one alert term,~~ said matching term information being stored in a storage means that is configured to allow fast insertion and fast deletion of content;

processing at least a portion of the matching extracted term information to determine whether to issue an alert; and .

issuing at least one alert to at least one client system, according to said determination~~;~~,

<u>wherein the alert comprises at least one field selected from the group consisting of:</u>

  <u>an information source identifier field,</u>
  <u>a link field, and</u>
  <u>an information source category identification.</u>

2.   (Currently Amended)   The method of claim 1, wherein the <u>processing at least a</u> portion of the matching extracted term information is determined by at least one alert ~~criteria~~ <u>criterion</u>.

3.   (Currently Amended)   The method of claim 2, wherein the at least one alert ~~criteria~~ <u>criterion</u> ~~comprising~~ <u>comprises</u> ~~of~~ at least one alert term that ~~matched~~ <u>matches</u> the at least one matching extracted term.

4. (Currently Amended) The method of claim 1, wherein the matching term information representative of a reception of matching extracted terms is updated during a predetermined period of time.

5. (Currently Amended) The method of claim 1, further comprising the steps of:
storing the information packet and related control data in the storage means; and
linking between the stored information packet and the matching extracted term information.

6. (Currently Amended) The method of claim 1, wherein the storage means holds an index data structure.

7. (Currently Amended) The method of claim 1, wherein the step of processing is preceded by at least one preprocessing step selected from a the group consisting of :
adding control data to said information packet;,
filtering the information packet;,
processing an extracted term by adding control information to said extracted term;, and
filtering the extracted term, wherein said filtered extracted terms are matched against alert terms.

8. (Currently Amended) The method of claim 1, wherein an the extracted term is extracted out of an the information packet by parsing and stemming the information packet; and wherein the step of filtering further comprising comprises a step selected from a the group consisting of : (a) discarding a term constructed of a one-letter word; (b) discarding a term constructed of a frequently used word; (c) discarding said a term constructed of a stop-word; and (d) discarding said a term constructed of a predefined word.

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9.   (Currently Amended)   The method of claim 1, ~~wherein a deletion of an~~ further comprising deleting the information packet; ~~is followed by a step of~~ and deleting the linked matching extracted term information.

10.   (Currently Amended)   The method of claim 1, wherein the alert terms and associated matching extracted term information are stored in an alert terms hash; wherein alert criteria are stored in an alert criteria map; and wherein the linked information packets are stored in a message hash.

11.   (Currently Amended)   The method of claim 10, wherein ~~a~~ the matching extracted term information is associated to a single matching extracted term comprising ~~of~~ at least one information field selected from ~~a~~ the group consisting of:

a last modification time field, indicating a most recent time of reception of the matching extracted term, during a predetermined period of time~~;~~,

a number of channels containing term, indicating a number of information sources that provided the matching extracted term during a predetermined period of time~~;~~,

a total instances field, indicating a total amount of receptions of the matching extracted term during a predetermined period of time~~;~~, and

a terms inverted entries map, comprising ~~of~~ a plurality of matching terms inverted file entries, each entry holding information representative of a reception of the matching extracted term from a single information source during a predetermined period of time.

12.   (Currently Amended)   The method of claim 11, wherein each matching term inverted file entry ~~comprising of~~ comprises at least one field selected from ~~a~~ the group consisting of :

a channel identifier, for identifying the information source that provided the matching extracted term during a predetermined period of time~~;~~,

an instances number, for indicating a total amount of receptions of the matching extracted term from an information source during a predetermined period of time~~;~~, and

a time of last appearance, for indicating a most recent time of reception of the matching extracted term from an information source during a predetermined period of time.

13.   (Currently Amended)   The method of ~~step~~ claim 12, wherein each information packet is further associated to a message terms key map, said message terms key map comprising ~~of~~ a plurality of message characteristic entries, each message characteristic entry associated to a matching extracted term being extracted from the information packet, said message characteristic entry comprising ~~of~~ at least one ~~of the following~~ fields selected from a the group consisting of:

a term inverted file, for pointing to the matching extracted term information~~;~~,

an instance of number, for indicating a number of times said matching extracted term appeared in the information packet~~;~~, and

an inverted file entry, for pointing to a terms inverted file entry.

14.   (Currently Amended)   The method of claim 9, wherein a the step of deleting ~~an~~ the information packet further comprises ~~of~~ the steps of:

receiving an information packet identification~~, whereas matching extracted term information representative of a reception of matching terms extracted from the information packets is to be deleted~~;

reading the information packet identification from the messages hash table;

obtaining relevant entries of said matching extracted terms belonging to said information packet; and

accessing ~~said~~ a matching extracted terms inverted file for each of said matching extracted terms entry pointed to by said terms inverted file.

15.   (Currently Amended)   The method of claim 14, wherein the step of deleting further ~~comprising~~ comprises a the step of decreasing a value of said total instances by a value of said instances number for each of said matching extracted terms entry pointed to by said terms inverted file.

16.   (Currently Amended)   The method of ~~step~~ claim 9, wherein a the step of deleting further ~~comprising a step of~~ comprises deleting an extracted term by a garbage collection process; and canceling a link between said term in said terms hash table and said terms inverted file.

17.   (Currently Amended)   The method of claim 1, wherein ~~an~~ the information source is selected from ~~a~~ the group consisting of: data network providers, chat channels providers, news providers, and music providers.

18.   (Currently Amended)   The method of claim 1, wherein the information packets comprises ~~of~~ content selected from ~~a~~ the group consisting of: text, audio, video, multimedia, and executable code streaming media.

19.   (Currently Amended)   The method of claim 1, wherein the step of processing further ~~involves a step of~~ comprises computing a similarity between an alert ~~criteria~~ criterion and matching term extracted information indicating a reception of ~~a~~ the group of at least one matching information packet.

20.   (Currently Amended)   The method of claim 19, wherein the group of at least one information packet ~~comprising~~ comprises of at least one information packet received from a single information source.

21.   (Currently Amended)   The method of claim 19, wherein the similarity reflects at least one of the following parameters :

a total amounts of extracted terms being received from at least one information source during a predefined time interval;

a number of matching extracted terms being received from at least one information source during the predefined time interval;

a total number of information sources being searched during the predefined time interval;

an elapsed time since a last appearance of a matching extracted term from an information source during the predefined time interval;

a position of matching extracted terms in at least one information source;

an extracted term in proximity to a matching extracted term;

a part of speech of a matching extracted term; and

a matching extracted term frequency and importance in a language of the information source.

22. (Currently Amended) The method of claim 1, wherein the step of processing implements a matching technique selected from a the group consisting of :

Boolean based matching;,

probabilistic matching;,

fuzzy matching;,

proximity matching;, and

vector based matching.

23. (Currently Amended) The method of claim 1, wherein the step of processing implements complex matching techniques.

24. (Currently Amended) The method of claim 1, wherein the step of issuing an alert further comprising a step of comprises determining to which client system to send an alert.

25. (Currently Amended) The method of claim 1, wherein the step of issuing an alert further comprising a step of comprises:

determining a format of an alert to be sent to a client system, according to a predefined client system format; and

formatting the alert according to said client system format.

26. (Currently Amended) The method of claim 25, wherein said predetermined client format is selected from a the group consisting of :

HTML format;,

WAP format;,

PDA compatible format;,

Digital television compatible format;,

electronic mail format;, and

multimedia stream format.

Claim 27 (Canceled).

28.   (Currently Amended)   The method of claim ~~27~~ 1, wherein ~~an~~ the link field allows the at least one client system to receive additional information ~~is~~ selected from ~~a~~ the group consisting of:

a multimedia stream originated by said information source;,

a stream of information packets originated by said information source;,

a multimedia stream associated to the information packet from which the extracted term was extracted;,

a stream of information packets, comprising the extracted term.

29.   (Currently Amended)   The method of claim ~~27~~ 1, wherein ~~a~~ the at least one client system is configured to generate a unique information source category indication in response to a reception of said information source category identification; and wherein ~~a~~ the at least one client system is configured ~~to and~~ to generate a unique information source indication and in response to a reception of said information source identification.

30.   (Currently Amended)   A method for real time alert, said method comprising the steps of :

receiving an information packet;, said information packets either provided by an information source or representative of a portion of a received signal provided by an information source;

extracting at least one extracted term out of the information packet;

determining whether an extracted term out of said at least one extracted term matches an alert term <u>within an alert criteria</u>, and accordingly updating a matching extracted term information representative of a reception of matching extracted terms during a predetermined period of time~~, an alert criteria comprising of at least one alert term~~;

processing at least a portion of the matching extracted term information to determine whether to issue an alert; and

issuing at least one alert to at least one client system, according to said determination~~,~~

<u>wherein the alert comprises at least one field selected from the group consisting of:</u>

<u>an information source identifier field,</u>

<u>a link field, and</u>

<u>an information source category identification.</u>

31.   (Currently Amended)   The method of claim 30, wherein the <u>processing at least a portion</u> of the matching extracted term information is determined by at least one alert ~~criteria~~ <u>criterion</u>.

32.   (Currently Amended)   The method of claim 31, wherein the at least one alert ~~criteria comprising of~~ <u>criterion comprises</u> at least one alert term that ~~matched~~ <u>matches</u> the at least one matching extracted term.

33.   (Currently Amended)   The method of claim 30, wherein the matching term information representative of a reception of matching extracted terms <u>is updated</u> during a predetermined period of time.

34.   (Currently Amended)   The method of claim 30, further comprising the steps of :

storing the information packet and related control data in a storage means; and

linking between the stored information packet and the matching extracted term information.

35.   (Currently Amended)   The method of claim 30, ~~wherein a deletion of an~~ further comprising deleting the information packet; and ~~is followed by a step of~~ deleting the linked extracted term information.

36.   (Currently Amended)   The method of claim 34, wherein the alert terms and associated matching term information are stored in an alert hash, the alert criteria are stored in an alert criteria map, and the linked information packet is stored in a message hash.

37.   (Currently Amended)   The method of claim 36, wherein a the matching extracted term information is associated to a single matching extracted term comprising ~~of~~ at least one information field selected from a the group consisting of:

a last modification time field, indicating a most recent time of reception of the matching extracted term, during a predetermined period of time;

a number of channels containing term, indicating a number of information sources that provided the matching extracted term during a predetermined period of time;

a total instances field, indicating a total amount of receptions of the matching extracted term during a predetermined period of time; and

a terms inverted entries map, comprising ~~of~~ a plurality of terms inverted file entries, each entry holding information representative of a reception of the matching extracted term from a single information source during a predetermined period of time.

38.   (Currently Amended)   The method of claim 37, wherein each inverted file entry ~~comprising of~~ comprises at least one field selected from a the group consisting of :

a channel identifier, for identifying the information source that provided the matching extracted term during a predetermined period of time;,

an instances number, for indicating a total amount of receptions of the matching extracted term from an information source during a predetermined period of time;, and

a time of last appearance, for indicating a most recent time of reception of the matching extracted term from an information source during a predetermined period of time.

39.   (Currently Amended)   The method of ~~step~~ claim 38, wherein each information packet is further associated to a message terms key map, said message terms key map comprising ~~of~~ a plurality of message characteristic entries, each message characteristic entry associated to a matching extracted term being extracted from the information packet, said message characteristic entry comprising ~~of~~ at least one ~~of the following~~ fields selected from a the group consisting of :

a term inverted file, for pointing to the matching extracted term information;

an instance of number, for indicating a number of times said matching extracted term appeared in the information packet; and

an inverted file entry, for pointing to a terms inverted file entry.

40.   (Currently Amended)   The method of claim 30, wherein the step of determining whether to issue an alert is based upon a parameter selected from a the group consisting of :

a total amounts of extracted terms being received from at least one information source during a predefined time interval;,

a number of relevant extracted terms being received from at least one information source during the predefined time interval;,

a total number of information sources being searched during the predefined time interval;,

an elapsed time since a last appearance of a relevant extracted term from an information source during the predefined time interval;,

a position of relevant extracted terms in at least one information source; extracted term in proximity to a relevant extracted term;,

a part of speech of a relevant extracted term;, and

a relevant extracted term frequency and importance in a language of the information source.

41.   (Currently Amended)   The method of claim 30, wherein the step of processing implements a matching technique selected from a the group consisting of :
        Boolean based matching;,
        probabilistic matching;,
        fuzzy matching;,
        proximity matching;, and
        vector based matching.

42.   (Currently Amended)   The method of claim 30, wherein the step of processing implements complex matching techniques.

43.   (Currently Amended)   The method of claim 30, wherein the step of processing further involves a step of comprises computing a similarity between an alert criteria and information indicating a reception of a group of at least one matching information packet.

44.   (Currently Amended)   The method of claim 40, wherein the group of at least one information packet comprising of comprises at least one information packet received from a single information source.

45.   (Currently Amended)   A method for real time alert, said method comprising the steps of :
        receiving an information packet; said information packets either provided by an information source or representative of a portion of a received signal provided by an information source;
        extracting at least one extracted term out of the information packet;
        determining whether an extracted term out of said at least one extracted term matches an alert term within an alert criteria, and accordingly updating a matching

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extracted term information representative of a reception of matching extracted terms, an alert criteria comprising of at least one alert term;

processing at least a portion of the matching extracted term information to determine whether to issue an alert, in response to a reception of a matching extracted term; and

issuing at least one alert to at least one client system, according to said determination.,

wherein the alert comprises at least one field selected from the group consisting of:

an information source identifier field,

a link field, and

an information source category identification.

46.   (Currently Amended)   The method of claim 45, wherein the processing at least a portion of the matching extracted term information is determined by at least one alert criteria criterion.

47.   (Currently Amended)   The method of claim 46, wherein the at least one alert criteria comprising of criterion comprises at least one alert term that matched matches the at least one matching extracted term.

48.   (Currently Amended)   The method of claim 45, wherein the matching term information representative of a reception of matching extracted terms is updated during a predetermined period of time.

49.   (Currently Amended)   The method of claim 45, wherein the matching extracted term information is representative of a reception of matching extracted terms during a predetermined period of time, and wherein said matching term information being is stored in a storage means that is configured to allow fast insertion and fast deletion of content.

50.   (Currently Amended)   The method of claim 45, further comprising the steps of :

storing the information packet and related control data in the storage means; and

linking between the stored information packet and the matching extracted term information;, wherein a deletion of an information packet is followed by a step of deleting the linked extracted term information.

51.   (Currently Amended)   The method of claim 45, wherein the storage means holds a term index data structure.

52.   (Currently Amended)   The method of claim 50, wherein alert terms and associated matching extracted terms information are stored in an alert terms hash, alert criteria are stored in an alert criteria map, and the linked matching extracted term information is stored in a message hash.

53.   (Currently Amended)   The method of claim 45, wherein a the matching extracted term information is associated to a single matching extracted term comprising of at least one information field selected from a the group consisting of:

a last modification time field, indicating a most recent time of reception of the matching extracted term, during a predetermined period of time;,

a number of channels containing term, indicating a number of information sources that provided the matching extracted term during a predetermined period of time;

a total instances field, indicating a total amount of receptions of the matching extracted term during a predetermined period of time;, and

a terms inverted entries map, comprising of a plurality of terms inverted file entries, each entry holding information representative of a reception of the matching extracted term from a single information source during a predetermined period of time.

54. (Currently Amended) The method of claim 53, wherein each inverted file entry ~~comprising of~~ comprises at least one field selected from ~~a~~ the group consisting of :

a channel identifier, for identifying the information source that provided the matching extracted term during a predetermined period of time~~;~~,

an instances number, for indicating a total amount of receptions of the matching extracted term from an information source during a predetermined period of time~~;~~, and

a time of last appearance, for indicating a most recent time of reception of the matching extracted term from an information source during a predetermined period of time.

55. (Currently Amended) The method of ~~step 55~~ claim 45, wherein each information packet is further associated to a message terms key map, said message terms key map comprising ~~of~~ a plurality of message characteristic entries, each message characteristic entry associated to a matching extracted term being extracted from the information packet, said message characteristic entry comprising ~~of~~ at least one ~~of the following~~ fields selected from ~~a~~ the group consisting of :

a term inverted file, for pointing to the matching extracted term information~~;~~,

an instance of number, for indicating a number of times said matching extracted term appeared in the information packet~~;~~, and

an inverted file entry, for pointing to a terms inverted file entry.

56. (Currently Amended) The method of claim 50, wherein ~~a~~ the step of deleting ~~an~~ the information packet further comprises ~~of~~ the steps of:

receiving an information packet identification~~, whereas matching extracted term information representative of a reception of matching terms extracted from the information packets is to be deleted~~;

reading the information packet identification from the messages hash table in said terms index data structure;

obtaining relevant entries of said extracted terms belonging to said information packet in said messages data; and

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accessing said terms inverted file for each of said terms entry pointed to by said terms inverted file.

57.   (Currently Amended)   The method of claim 45, wherein the step of processing further ~~involves a step of~~ comprises computing a similarity between an alert criteria and information indicating a reception of a group of at least one matching information packet.

58.   (Currently Amended)   The method of claim 57, wherein the group of at least one matching information packet ~~comprising of~~ comprises at least one information packet received from a single information source.

59.   (Currently Amended)   The method of claim 57, wherein the similarity reflects at least one of the following parameters :
a total amounts of extracted terms being received from at least one information source during a predefined time interval;
a number of matching extracted terms being received from at least one information source during the predefined time interval;
a total number of information sources being searched during the predefined time interval;
an elapsed time since a last appearance of a matching extracted term from an information source during the predefined time interval;
a position of matching extracted terms in at least one information source;
extracted term in proximity to a relevant extracted term;
a part of speech of a matching extracted term; and
a relevant extracted term frequency and importance in a language of the information source.

60.   (Currently Amended)   The method of claim 45, wherein the step of processing implements a matching technique selected from a the group consisting of:
~~boolean~~ Boolean based matching;,

probabilistic matching;

fuzzy matching;

proximity matching; and

vector based matching.

61.   (Currently Amended)   The method of claim 45, wherein the step of processing implements complex matching techniques.

62.   (Currently Amended)   The method of claim 45, wherein the step of issuing an alert further ~~comprising the steps of~~ comprises:

determining to which client system to send an alert;

determining a format of an alert to be sent to a client system, according to a predefined client system format; and

formatting the alert according to said client system format.

Claim 63 (Canceled).

64.   (Currently Amended)   The method of claim ~~63~~ 45, wherein ~~an~~ the link field allows the at least one client system to receive additional information ~~is~~ selected from ~~a~~ the group consisting of:

a multimedia stream originated by said information source;

a stream of information packets originated by said information source;

a multimedia stream associated to the information packet from which the extracted term was extracted;

a stream of information packets, comprising the extracted term.

65.   (Currently Amended)   A method for real time alert, said method comprising the steps of :

receiving an information stream, said information stream either provided by an information source or representative of a portion of a received signal provided by an information source;

generating a plurality of information packets from said information stream;

extracting at least one extracted term out of the information packet~~s~~;

determining whether an extracted term out of said at least one extracted term matches an alert term within an alert criteria, and accordingly updating a matching term information representative of a reception of matching extracted terms, ~~an alert criteria comprising of at least one alert term~~;

processing at least a portion of the matching extracted term information to determine whether to issue an alert; and

issuing at least one alert to at least one client system, according to said determination~~,~~.

wherein the alert comprises at least one field selected from the group consisting of:

an information source identifier field,

a link field, and

an information source category identification.

66.   (Currently Amended)   The method of claim 65, wherein the processing at least a portion of the matching extracted term information is determined by at least one alert ~~criteria~~ criterion.

67.   (Currently Amended)   The method of claim 66, wherein the at least one alert ~~criteria comprising of~~ criteria comprises at least one alert term that ~~matched~~ matches the at least one matching extracted term.

68.   (Currently Amended)   The method of claim 65, wherein the matching term information representative of a reception of matching extracted terms is updated during a predetermined period of time.

69.   (Currently Amended)   The method of claim 65, further comprising the steps of :

storing an information packet and related control data in a storage means; and

linking between the stored information packet and the matching extracted term information.

70.   (Currently Amended)   The method of claim 65, ~~wherein a deletion of an~~ further comprising deleting the information packet; and ~~is followed by a step of~~ deleting the linked extracted term information.

71.   (Currently Amended)   The method of claim 65, wherein the alert terms are stored in an alert terms hash, the alert criteria are stored in an alert criteria map, and ~~wherein~~ the linked matching extracted term information is stored in a terms hash.

72.   (Currently Amended)   The method of claim 65, wherein ~~a~~ the matching extracted term information is associated to a single alert term comprising ~~of~~ at least one information field selected from ~~a~~ the group consisting of:

a last modification time field, indicating a most recent time of reception of the matching extracted term, during a predetermined period of time;~~,~~

a number of channels containing term, indicating a number of information sources that provided the matching extracted term during a predetermined period of time;~~,~~

a total instances field, indicating a total amount of receptions of the matching extracted term during a predetermined period of time;~~,~~ and

a terms inverted entries map, comprising ~~of~~ a plurality of terms inverted file entries, each entry holding information representative of a reception of the matching extracted term from a single information source during a predetermined period of time.

73.   (Currently Amended)   The method of claim 72, wherein each inverted file entry ~~comprising of~~ comprises at least one field selected from ~~a~~ the group consisting of :

a channel identifier, for identifying the information source that provided the matching extracted term during a predetermined period of time;~~,~~

an instances number, for indicating a total amount of receptions of the matching extracted term from an information source during a predetermined period of time;~~,~~ and

time of last appearance, for indicating a most recent time of reception of the matching extracted term from an information source during a predetermined period of time.

74. (Currently Amended) The method of ~~step~~ claim 73, wherein each information packet is further associated to a message terms key map, said message terms key map comprising ~~of~~ a plurality of message characteristic entries, each message characteristic entry associated to a matching extracted term being extracted from the information packet, said message characteristic entry comprising ~~of~~ at least one ~~of the following~~ fields selected from ~~a~~ the group consisting of :

a term inverted file, for pointing to the matching extracted term information~~;~~,

an instance of number, for indicating a number of times said matching extracted term appeared in the information packet~~;~~, and

an inverted file entry, for pointing to a terms inverted file entry.

75. (Currently Amended) The method of claim 65, wherein the step of determining whether to issue an alert is based upon a parameter out of ~~a~~ the group consisting of :

a total amounts of extracted terms being received from at least one information source during a predefined time interval;

a number of relevant extracted terms being received from at least one information source during the predefined time interval;

a total number of information sources being searched during the predefined time interval;

an elapsed time since a last appearance of a relevant extracted term from an information source during the predefined time interval;

a position of relevant extracted terms in at least one information source;

extracted term in proximity to a relevant extracted term;

a part of speech of a relevant extracted term; and

a relevant extracted term frequency and importance in a language of the information source.

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76.   (Currently Amended)   The method of claim 65, wherein the step of processing implements a matching technique selected from a the group consisting of :

Boolean based matching;,

probabilistic matching;,

fuzzy matching;,

proximity matching;, and

vector based matching.

77.   (Currently Amended)   The method of claim 65, wherein the step of processing implements complex matching techniques.

78.   (Currently Amended)   The method of claim 65, wherein the step of processing further involves a step of comprises computing a similarity between an alert criteria and information indicating a reception of a group of at least one matching information packet.

79.   (Currently Amended)   The method of claim 78, wherein the group of at least one information packet comprising of comprises at least one information packet received from a single information source.

80.   (Currently Amended)   A method for real time alert, said method comprising the steps of :

receiving an information packet, said information packet either provided by an information source or representative of a portion of a received signal provided by an information source;

extracting at least one extracted term out of the information packet;

determining whether an extracted term out of said at least one extracted term matches an alert term within an alert criteria, and accordingly updating a matching term information representative of a reception of matching extracted terms, an alert criteria comprising of at least one alert term;

processing a portion of the matching extracted term information to determine whether to issue an alert; said portion representative of a reception of at least one matching information from a single information source; and

issuing at least one alert to at least one client system, according to said determination;

wherein the alert comprises at least one field selected from the group consisting of:

an information source identifier field,

a link field, and

an information source category identification.

81.   (Currently Amended)   The method of claim 80, wherein the processing at least a portion of the matching extracted term information is determined by at least one alert criteria criterion.

82.   (Currently Amended)   The method of claim 81, wherein the at least one alert criteria comprising of criterion comprises at least one alert term that matched matches the at least one matching extracted term.

83.   (Currently Amended)   The method of claim 80, wherein the matching term information representative of a reception of matching extracted terms is updated during a predetermined period of time.

84.   (Currently Amended)   The method of claim 80, further comprising the steps of :

storing an information packet and related control data in a storage means; and

linking between the stored information packet and the matching extracted term information.

85.   (Currently Amended)   The method of claim 80, ~~wherein a deletion of an~~ further comprises deleting the information packet; and ~~is followed by a step of~~ deleting the linked extracted term information.

86.   (Currently Amended)   The method of claim 80, wherein alert terms are stored in an alert terms hash, ~~an~~ alert criteria ~~comprising of at least one alert term~~ are stored in an alert criteria map, and wherein the linked matching extracted term information is stored in a terms hash.

87.   (Currently Amended)   The method of claim 80, wherein the matching extracted term information is associated to a single matching extracted term comprising ~~of~~ at least one information field selected from ~~a~~ the group consisting of:

a last modification time field, indicating a most recent time of reception of the matching extracted term, during a predetermined period of time;

a number of channels containing term, indicating a number of information sources that provided the matching extracted term during a predetermined period of time;

a total instances field, indicating a total amount of receptions of the matching extracted term during a predetermined period of time; and

a terms inverted entries map, comprising ~~of~~ a plurality of terms inverted file entries, each entry holding information representative of a reception of the matching extracted term from a single information source during a predetermined period of time.

88.   (Currently Amended)   The method of claim 87, wherein each inverted file entry ~~comprising of~~ comprises at least one field selected from ~~a~~ the group consisting of :

a channel identifier, for identifying the information source that provided the matching extracted term during a predetermined period of time;

an instances number, for indicating a total amount of receptions of the matching extracted term from an information source during a predetermined period of time; and

a time of last appearance, for indicating a most recent time of reception of the matching extracted term from an information source during a predetermined period of time.

89. (Currently Amended) The method of step claim 88, wherein each information packet is further associated to a message terms key map, said message terms key map comprising of a plurality of message characteristic entries, each message characteristic entry associated to a matching extracted term being extracted from the information packet, said message characteristic entry comprising of at least one of the following fields selected from a the group consisting of:

a term inverted file, for pointing to the matching extracted term information;

an instance of number, for indicating a number of times said matching extracted term appeared in the information packet; and

an inverted file entry, for pointing to a terms inverted file entry.

90. (Currently Amended) The method of claim 80, wherein the step of determining whether to issue an alert is based upon a parameter out of a the group consisting of :

a total amounts of extracted terms being received from at least one information source during a predefined time interval;

a number of relevant extracted terms being received from at least one information source during the predefined time interval;

a total number of information sources being searched during the predefined time interval;

an elapsed time since a last appearance of a relevant extracted term from an information source during the predefined time interval;

a position of relevant extracted terms in at least one information source; extracted term in proximity to a relevant extracted term;

a part of speech of a relevant extracted term; and

a relevant extracted term frequency and importance in a language of the information source.

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91.   (Currently Amended)   The method of claim 80, wherein the step of processing implements a matching technique selected from a the group consisting of :

    Boolean based matching;,

    probabilistic matching;,

    fuzzy matching;,

    proximity matching;, and

    vector based matching.

92.   (Currently Amended)   The method of claim 80, wherein the step of processing implement complex matching techniques.

93.   (Currently Amended)   A method for real time alert, said method comprising the steps of :

    receiving an information stream, said information stream either provided by an information source or representative of a portion of a received signal provided by an information source;

    determining whether the information stream comprising of comprises information packets, and if the information stream is not comprised of information packets, then generating a plurality of information packets from said information stream;

    extracting at least one extracted term out of the information packet;

    determining whether an extracted term out of said at least one extracted term matches an alert term within an alert criteria, and accordingly updating a matching term information representative of a reception of matching extracted terms, an alert criteria comprising of at least one alert term;

    processing at least a portion of the matching extracted term information to determine whether to issue an alert; and

    issuing at least one alert to at least one client system, according to said determination,

    wherein the alert comprises at least one field selected from the group consisting of:

an information source identifier field,

a link field, and

an information source category identification.

94.   (Currently Amended)   The method of claim 93, wherein the processing at least a portion of the matching extracted term information is determined by at least one alert criteria criterion.

95.   (Currently Amended)   The method of claim 94, wherein the at least one alert criteria comprising of criterion comprises at least one alert term that matched matches the at least one matching extracted term.

96.   (Currently Amended)   The method of claim 93, wherein the matching term information representative of a reception of matching extracted terms is updated during a predetermined period of time.

97.   (Currently Amended)   The method of claim 93, further comprising the steps of :

storing an information packet and related control data in a storage means; and

linking between the stored information packet and the matching extracted term information.

98.   (Currently Amended)   The method of claim 93, wherein a deletion of an further comprising deleting the information packet; and is followed by a step of deleting the linked extracted term information.

99.   (Currently Amended)   The method of claim 93, wherein alert terms are stored in an alert terms hash, alert criteria are stored in an alert criteria map, and wherein the linked matching extracted term information is stored in a terms hash.

100. (Currently Amended)   The method of claim 93, wherein the matching extracted term information is associated to a single matching extracted term comprising of at least one information field selected from a the group consisting of:

a last modification time field, indicating a most recent time of reception of the matching extracted term, during a predetermined period of time;,

a number of channels containing term, indicating a number of information sources that provided the matching extracted term during a predetermined period of time;,

a total instances field, indicating a total amount of receptions of the matching extracted term during a predetermined period of time;, and

a terms inverted entries map, comprising of a plurality of terms inverted file entries, each entry holding information representative of a reception of the matching extracted term from a single information source during a predetermined period of time.

101. (Currently Amended)   The method of claim 100, wherein each inverted file entry comprising of comprises at least one field selected from a the group consisting of :

a channel identifier, for identifying the information source that provided the matching extracted term during a predetermined period of time;,

an instances number, for indicating a total amount of receptions of the matching extracted term from an information source during a predetermined period of time;, and

a time of last appearance, for indicating a most recent time of reception of the matching extracted term from an information source during a predetermined period of time.

102. (Currently Amended)   The method of step claim 101, wherein each information packet is further associated to a message terms key map, said message terms key map comprising of a plurality of message characteristic entries, each message characteristic entry associated to a matching extracted term being extracted from the information packet, said message characteristic entry comprising of at least one of the following fields selected from a the group consisting of :

a term inverted file, for pointing to the matching extracted term information;,

an instance of number, for indicating a number of times said matching extracted term appeared in the information packet; and

an inverted file entry, for pointing to a terms inverted file entry.

103. (Currently Amended) The method of claim 93, wherein the step of determining whether to issue an alert is based upon a parameter out of a the group consisting of :

a total amounts of extracted terms being received from at least one information source during a predefined time interval;

a number of relevant extracted terms being received from at least one information source during the predefined time interval;

a total number of information sources being searched during the predefined time interval;

an elapsed time since a last appearance of a relevant extracted term from an information source during the predefined time interval;

a position of relevant extracted terms in at least one information source; extracted term in proximity to a relevant extracted term;

a part of speech of a relevant extracted term; and

a relevant extracted term frequency and importance in a language of the information source.

104. (Currently Amended) The method of claim 93, wherein the step of processing implements a matching technique selected from a the group consisting of :

Boolean based matching;

probabilistic matching;

fuzzy matching;

proximity matching; and

vector based matching.

105. (Currently Amended) The method of claim 93, wherein the step of processing implements complex matching techniques.

106.   (Currently Amended)   The method of claim 93 wherein the step of processing further ~~involves a step of~~ comprises computing a similarity between an alert criteria and information indicating a reception of a group of at least one matching information packet.

107.   (Currently Amended)   The method of claim 106, wherein the group of at least one information packet ~~comprising of~~ comprises at least one information packet received from a single information source.

108.   (Currently Amended)   A system for real time alert, said system comprising ~~of~~:

an information packet processor, for receiving an information packet, and extracting at least one extracted term out of the information packet, said information packets either provided by an information source or representative of a portion of a received signal provided by an information source;

a storage means, configured to allow fast insertion and fast deletion of content, for storing matching term information representative of a reception of matching extracted terms, ~~an alert criteria comprising of at least one alert term~~;

a storage means controller, coupled to the information packet processor and to the storage means, for receiving the at least one extracted term, for determining whether an extracted term out of said at least one extracted term matches an alert term within an alert criteria, and accordingly for updating the matching term information; and

an alert module, coupled to the storage means, for processing at least a portion of the matching extracted term information to determine whether to issue an alert, and for issuing at least one alert to at least one client system, according to said determination,

wherein the alert comprises at least one field selected from the group consisting of:

an information source identifier field,

a link field, and

an information source category identification.

109.   (Currently Amended) .   The system of claim 108, wherein the <u>processing at</u> <u>least a</u> portion of the matching extracted term information is determined by at least one alert <s>criteria</s> <u>criterion</u>.

110.   (Currently Amended)   The system of claim 109, wherein the at least one alert <s>criteria comprising of</s> <u>criterion comprises</u> at least one alert term that <s>matched</s> <u>matches</u> the at least one matching extracted term.

111.   (Currently Amended)   The system of claim 106, wherein the matching term information representative of a reception of matching extracted terms <u>is updated</u> during a predetermined period of time.

112.   (Currently Amended)   The system of claim 108, the storage means controller further adapted to store the information packet and related control data in the storage means, and to link between the stored information packet and the matching extracted term information.

113.   (Currently Amended)   The system of claim 108, wherein the storage means holds a term index data structure.

114.   (Currently Amended)   The system of claim 108, wherein the information packet processor is further adapted to perform at least one preprocessing step selected from <s>a</s> <u>the</u> group consisting of: adding control data to said information packet, filtering the information packet, processing an extracted term by adding control information to said extracted term, and filtering the extracted term, wherein said filtered extracted terms are matched against alert terms.

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115. (Currently Amended)   The system of claim 108, wherein the information packet processor is configured to extract an extracted term from an information packet by parsing and stemming the information packet.

116. (Currently Amended)   The system of claim 108, wherein the storage means controller is adapted to delete information packets from the storage means, after a predetermined period has lapsed; and wherein a deletion of an information packet is followed by a deletion of the linked extracted term information.

117. (Currently Amended)   The system of claim 108, wherein alert terms and matching terms information are stored in an alert terms hash, alert criteria are stored in an alert criteria map, and wherein the linked information packets are stored in a message hash.

118. (Currently Amended)   The system of claim 108, wherein the matching extracted term information comprising of comprises at least one information field selected from a the group consisting of:

a last modification time field, indicating a most recent time of reception of the matching extracted term, during a predetermined period of time;,

a number of channels containing term, indicating a number of information sources that provided the matching extracted term during a predetermined period of time;,

a total instances field, indicating a total amount of receptions of the matching extracted term during a predetermined period of time;, and

a terms inverted entries map, comprising of a plurality of matching terms inverted file entries, each entry holding information representative of a reception of the matching extracted term from a single information source during a predetermined period of time.

119. (Currently Amended)   The system of claim 118, wherein each matching term inverted file entry comprising of comprises at least one field selected from a the group consisting of :

a channel identifier, for identifying the information source that provided the matching extracted term during a predetermined period of time;~

~an~ instances number, for indicating a total amount of receptions of the matching extracted term from an information source during a predetermined period of time;~ and

~a~ time of last appearance, for indicating a most recent time of reception of the matching extracted term from an information source during a predetermined period of time.

120.   (Currently Amended)   The system of ~step~ claim 119, wherein each information packet is further associated to a message terms key map, said message terms key map comprising ~of~ a plurality of message characteristic entries, each message characteristic entry associated to a matching extracted term being extracted from the information packet, said message characteristic entry comprising ~of~ at least one ~of the following~ fields selected from a the group consisting of :

a term inverted file, for pointing to the matching extracted term information;~

an instance of number, for indicating a number of times said matching extracted term appeared in the information packet;~ and

an inverted file entry, for pointing to a terms inverted file entry.

121.   (Currently Amended)   The system of claim 120, wherein the storage means controller is further adapted to determine a deletion of an information packet and ~associeted~ associated matching extracted term information.

122.   (Currently Amended)   The system of claim ~106~ 108, wherein the storage means controller is adapted to access the message hash table, to obtain relevant entries of said matching extracted terms belonging to said information packet; and to access said matching extracted terms inverted file for each said matching extracted terms entry pointed to by said matching extracted terms inverted file.

123.   (Currently Amended)   The system of claim 108, wherein the alert module is adapted to rank information sources according to a similarity between at least a portion

of information packets provided by said information sources and between an alert criteria.

124.   (Currently Amended)   The system of claim 108, wherein the said rank is based upon a parameter out of a selected from the group consisting of :

a total amount of extracted terms provided by an information source in a predefined time interval;,

an elapsed time since the extracted term was provided by the information source in said predefined time interval;, and

an extracted term position in the information source.

125.   (Currently Amended)   The system of claim 108, wherein an the information source is selected from a the group consisting of: data network providers, chat channels providers, news providers, and music providers.

126.   (Currently Amended)   The system of claim 108, wherein information packets comprise of content selected from a the group consisting of : text, audio, video, multimedia, and executable code streaming media.

127.   (Currently Amended)   The system of claim 108, further adapted to compute a similarity between an alert criteria and information indicating a reception of a group of at least one matching information packet.

128.   (Currently Amended)   The system of claim 127, wherein the group of at least one information packet comprising of comprises at least one information packet received from a single information source.

129.   (Currently Amended)   The system of claim 128, wherein the similarity reflects at least one of the following parameters selected from the group consisting of:

a total amounts of extracted terms being received from at least one information source during a predefined time interval;

a number of matching extracted terms being received from at least one information source during the predefined time interval;

a total number of information sources being searched during the predefined time interval;

an elapsed time since a last appearance of a matching extracted term from an information source during the predefined time interval;

a position of matching extracted terms in at least one information source;

an extracted term in proximity to a matching extracted term;

a part of speech of a matching extracted term; and

a matching extracted term frequency and importance in a language of the information source.

130. (Currently Amended)   The system of claim 108, wherein the alert module is further adapted to implement a matching technique selected from a the group consisting of :

boolean Boolean based matching;,

probabilistic matching;,

fuzzy matching;,

proximity matching;, and

vector based matching.

131. (Currently Amended)   The system of claim 108, wherein the alert module is further adapted to implement complex matching techniques.

132. (Currently Amended)   The system of claim 108, wherein the alert module is further adapted to determine to which client system to send an alert.

133. (Currently Amended)   The system of claim 108, wherein the alert module is further adapted to determine a format of an alert to be sent to a client system, according to a predefined client system format, and to formatting the alert according to said client system format.

134. (Currently Amended)   The system of claim 133, wherein said predetermined client format is selected from a the group consisting of :

    HTML format;,

    WAP format;,

    PDA compatible format;,

    Digital television compatible format;,

    electronic mail format;, and

    multimedia stream format.

Claim 135 (Canceled).

136. (Currently Amended)   The system of claim 135 108, wherein an the link field allows the at least one client system to receive additional information is selected from a the group consisting of :

    a multimedia stream originated by said information source;,

    a stream of information packets originated by said information source;,

    a multimedia stream associated to the information packet from which the extracted term was extracted;, and

    a stream of information packets, comprising the extracted term.

137. (Currently Amended)   The system of claim 136, wherein a the client system is configured to generate a unique information source category indication in response to a reception of said information source category identification.

138. (Currently Amended)   The system of claim 108, wherein a the client system is configured to and to generate a unique information source indication in response to a reception of said information source identification.

139. (Currently Amended) The system of claim 108, ~~whereas~~ wherein the information packet processor ~~comprising of~~ comprises at least one module selected from a group of modules consisting of :

a message coordinator module adapted to coordinate an handling of a plurality of information packets;

a message filter module for filtering the plurality of information packets according to predefined rules;

a term extractor module for performing parsing and stemming on said plurality of information packets; and

a terms filter for excluding extracted terms according to predefined rules.

140. (Currently Amended) The system of claim 108, wherein the storage means holds a term index data structure, said term index data structure further comprising:

an alert terms hash table to hold alert terms ;

a matching extracted terms inverted file pointed to by said alert term hash table holding a matching extracted terms inverted entry map;

a messages hash table to hold information packets identification;

a messages data table to hold information packets data; and

a channel map to hold a list of information sources and the related number of index terms of said information source.

141. (Currently Amended) The system of claim 140, wherein the terms inverted file further ~~comprising~~ comprises:

a matching extracted terms inverted entries map table;

a total instances of said matching extracted term;

a number of information sources containing said matching extracted term; and

a last modification time of said matching extracted term.

142. (Currently Amended) The system of claim 141, further comprising:

a message terms keyed map;

an information source identification; and

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an information packet time of arrival.

143. (Currently Amended)   The system of claim 142, wherein the message terms keyed map further ~~comprising~~ comprises:

a pointer to said matching extracted terms inverted file;

an instances number of said matching extracted term in said information packet; and

a pointer to said inverted file entry related to said matching extracted term.

144. (Currently Amended)   The system of claim 143, wherein the matching extracted terms inverted entries map further ~~comprising;~~ comprises:

an information source identification;

an instances number of said matching extracted term in said information source informational content; and

a time of last appearance of said matching extracted term in said information source informational content.

145. (Currently Amended)   The system of claim 108, wherein the storage means further allows timely deletions of irrelevant or time-decayed terms and query-terms.

146. (Currently Amended)   The system of claim 108, further comprising an alert criteria module~~,~~ coupled to the storage means~~,~~ to the storage means controller, and to a plurality of client systems~~,~~ for handling client system requests ~~form~~ updating alert criteria.

147. (Currently Amended)   The system of claim 146, wherein the alert criteria module ~~comprising of~~ comprises at least one module selected from ~~a~~ the group consisting of:

an alert criteria coordinator module to coordinate the processing of alert criteria~~;~~,

an alert term extractor to parse and stem incoming alert criteria in order to extract and process operative alert terms~~;~~, and

an alert terms filter for excluding specific alert terms in a predefined manner.

148. (Currently Amended) A system for real time alert, said system comprising ~~of~~:

an information packet processor~~,~~ for receiving an information packet~~;~~ and extracting at least one extracted term out of the information packet~~;~~, said information packets either provided by an information source or representative of a portion of a received signal provided by an information source;

a storage means~~,~~ for storing matching term information representative of a reception of matching extracted terms~~, an alert criteria comprising of at least one alert term~~;

a storage means controller~~,~~ coupled to the information packet processor and to the storage means, for receiving the at least one extracted term, for determining whether an extracted term out of said at least one extracted term matches an alert term <u>within an alert criteria</u>, and accordingly for updating the matching term information; and

an alert module~~,~~ coupled to the storage means, for processing at least a portion of the matching extracted term information to determine whether to issue an alert~~;~~, and for issuing at least one alert to at least one client system~~,~~ according to said determination~~.~~,

<u>wherein the alert comprises at least one field selected from the group consisting of:</u>

<u>an information source identifier field,</u>

<u>a link field, and</u>

<u>an information source category identification.</u>

149. (Currently Amended) The system of claim 148, wherein the <u>processing at least a</u> portion of the matching extracted term information is determined by at least one alert ~~criteria~~ <u>criterion</u>.

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150. (Currently Amended)   The system of claim 148, wherein the at least one alert ~~criteria comprising of~~ <u>criterion comprises</u> at least one alert term that ~~matched~~ <u>matches</u> the at least one matching extracted term.

151. (Currently Amended)   The system of claim 148, wherein the matching term information representative of a reception of matching extracted terms <u>is updated</u> during a predetermined period of time.

152. (Currently Amended)   The system of claim 148, further comprising an information interface~~,~~ coupled to the information packet processor, said information interface adapted to receive information streams and to provide information packets to the information packet processor.

153. (Currently Amended)   The system of claim 148, wherein the information interface <u>is</u> further coupled to the storage means controller, for allowing a storage of said information packets in the storage means.